

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference WOP0277A	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 03/03928	International filing date (day/month/year) 10.09.2003	Priority date (day/month/year) 24.09.2002
International Patent Classification (IPC) or both national classification and IPC A47L9/04		
Applicant DYSON LTD		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I Basis of the opinion
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 20.04.2004	Date of completion of this report 11.01.2005
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Cabral Matos, A Telephone No. +31 70 340-2668



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I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-14 as originally filed

Claims, Numbers

1-15 as originally filed

Drawings, Sheets

1/9-9/ as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

the entire international application,

claims Nos. 15

because:

the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 15 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

no international search report has been established for the said claims Nos.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

the written form has not been furnished or does not comply with the Standard.

the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims 1-14

No: Claims

Inventive step (IS) Yes: Claims 1-14

No: Claims

Industrial applicability (IA) Yes: Claims 1-14

No: Claims

2. Citations and explanations

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Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claim 15 contains references to the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here. Therefore this claim should be deleted.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following document:

D1: US2904816 (SKOLFIELD, W.K.) 22 September 1959 (1959-09-22)

2 Novelty - Article 33(2) PCT

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document; cf. column 5, line 9 to 25; figure 2):

A vacuum cleaning head comprising a housing (10), an agitator (62) for agitating a floor surface, a chamber (12) in the housing (10) for rotatably receiving the agitator (62), an opening (32) in the chamber (12), adjacent the agitator (62), for facing a floor surface, an air turbine (50) for driving the agitator (62), an air inlet (48) in the housing (10) for admitting clean air to drive the turbine (50), a restricting device (68) for fitting in a discharge outlet (44) from the chamber (12), and wherein the restricting device (68) is arranged to be movable between a restrictive position, in which it serves to restrict the cross-section of the discharge outlet (44), and an open position, in which it restricts the cross-section of the discharge outlet (44) to a lesser extent.

The subject-matter of claim 1 differs from this known vacuum cleaning head in that the restricting device is movable between the restrictive position and the open position by the

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flow of debris from the chamber, whereas in D1 the restricting device is movable by a rotating knob (74) (cf. figures 3 and 4).

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

3 Inventive step - Article 33(3) PCT

The problem to be solved by the present invention may be regarded as to provide a mechanism which, when the cross-section of the discharge outlet is restricted, avoids blockage of the discharge outlet in the event that a large piece of debris flows along the outlet.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT), because in the prior art it is neither known nor suggested to provide a vacuum cleaning head in which a restricting device for restricting the cross-section of the discharge outlet is movable by the flow of debris from the chamber.

4 Dependent claims

Claims 2 to 13 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

5 Independent claim 14

Claim 14 relates to a vacuum cleaner incorporating a vacuum cleaning head according to any one of claims 1 to 13 and as such also meets the requirements of the PCT with respect to novelty and inventive step.